Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services

STATEMENT OF BASIS

Graphic Packaging International Inc
West Monroe Packaging Plant #70
West Monroe, Ouachita Parish, Louisiana
Agency Interest Number: 39129
Activity Number: PER20090001
Proposed Permit Number: 2160-00008-V2

I. APPLICANT

Company:
Graphic Packaging International Inc
PO Box 35800
West Monroe, Louisiana 71294-5800

Facility:
West Monroe Packaging Plant #70
1070 Jonesboro Rd
West Monroe, Ouachita Parish, Louisiana
Approximate UTM coordinates are 579.700 kilometers East and 3,594.300 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS

Graphic Packaging manufactures beverage cartons and carriers from paperboard at the West Monroe Packaging Plant. The manufacturing processes consist of printing, cutting, folding, and gluing. The printing presses are packaging rotogravure and packaging flexographic presses. Except for the inks for the ink jet printer, which can be either water or solvent based, the inks and overprint varnishes used at this facility are exclusively water based. The product shapes are cut by in-line cutters that limit the production rates to those presented in the emission calculations. The facility is classified as SIC Code 2657, folding paperboard boxes.

The West Monroe Packaging Plant is a major source of VOC as defined in LA 33:III.504 because it emits more than 100 tons per year of VOC. The packaging facility also emits hazardous air pollutants (HAPs) in quantities that exceed 10 tons of any HAP and 25 tons of HAP in aggregate. Therefore, this facility is major source of VOC and HAP.

In addition, the West Monroe Packaging Plant is contiguous to and is under common ownership with the Graphic Packaging International, Inc. Paperboard Mill, Agency Interest No. 1432, which operates under Title V Permit No. 2160-00001-V5, issued March 30, 2009. The Paperboard Mill is a major source of VOC and hazardous air pollutants.

Rotogravure printing presses use steel cylinders that are plated with copper and chrome. The metal cylinders are engraved in such a fashion as to produce image areas

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Ink and adhesive are removed from process equipment by utilizing the following equipment: Magnus Tank, Graymills 1 and 2, Anilox Roll Cleaner, Pressure Washers, and PRI Washer. Cleaning operations utilize a soap that does not contain or emit any regulated air pollutants. Therefore, these equipment items are not permitted as emission points. Wastewater from cleaning operations is treated in the plant's wastewater treatment system.

For both rotogravure and flexographic printing presses, Graphic Packaging uses only water-based inks and varnishes that comply with LAC 33:III.2143.A.1. Under this regulation, the volatile fraction, as applied to the substrate, less water and exempt solvent, must contain 25 volume percent or less of organic solvent and 75 volume percent or more of water. Graphic Packaging's rotogravure and flexographic printing inks also comply with the alternate LAC 33:III.2143.A.1 requirement by containing no more than 0.5 pounds of VOC per pound of solids.

The rotogravure inks are purchased as a concentrate and are prepared for printing by mixing with extenders, additives, and a water-n-propanol mixture, that is used primarily as a surface tension modifier. The mixture is 24% by volume (20% by weight) n-propanol and 76% by volume (80% by weight) water. After all components are added, the ink is "press-ready". Occasionally, additives must be replaced due to evaporation while on press. When this is necessary, additives are added into the ink sumps. Flexographic inks are adjusted with additives prior to printing, but are not thinned with water or alcohol.

The press ready rotogravure and flexographic inks contain and emit VOCs, ammonia, a Class III Louisiana toxic air pollutant, and minor quantities of HAPs consisting of glycol ethers, styrene, and acrylic acid. Overprint varnishes are purchased in "press-ready" form, and are not mixed with additives. Overprint varnishes contain and emit VOCs, ammonia, and minor quantities of styrene and acrylic acid.

A capture system is used to minimize fugitive emissions around the press. Graphic Packaging assumes that 65% of the volatile components of the printing press inks and varnishes are captured and discharged through the dryer exhaust stack, along with the dryer combustion products. The remaining volatile components are accounted for as fugitive emissions.

All production adhesives are water based and are used exclusively in finishing operations. Hot melt glues are used for special purposes such as attaching inserts or making repairs. The water based adhesives contain less than 1% VOC by weight. The VOC component is primarily vinyl acetate, which is a Table 51.1 Class III toxic air pollutant.

West Monroe Packaging Plant # 70 is a designated Part 70 source. The facility currently operates under Title V Permit No. 2160-00008-V2, issued October 21, 2005 and PSD-LA-697 (M-1), issued September 14, 2004.

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IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Applicability and Exemptions of Selected Subject Items

ID No:	Requirement	Notes
UNF 01 West Monroe Plant # 70	Chemical Accident Prevention [40 CFR 68]	DOES NOT APPLY. There are no regulated substances in quantities greater than the threshold quantities specified in 40 CFR 68.130. [40 CFR 68.10(a)]
EQT 04, EQT 06, EQT 07, EQT 13,EQT 15, EQT 17	Compliance Assurance Monitoring for Major Stationary Sources [40 CFR 64]	DOES NOT APPLY. No emission points at the plant meet the criteria for CAM applicability (i.e., subject to emission limitation, use of control device to achieve compliance, and has the potential pre-control device emissions greater than the major source threshold). [40 CFR 64.2(a)]
	Chemical Accident Prevention and Minimization of Consequences [LAC 33:III.Chapter 59]	DOES NOT APPLY. The facility does not produce, handle, or store substances listed in CFR 68.130 or Table 59.0 and/or Table 59.1 of LAC 33:III.Chapter 59. [LAC 33:III.5907.A]
	Emission Standards for Sulfur Dioxide [LAC 33:III.Chapter 15]	DOES NOT APPLY. These sources emit less than 5 tons per year of SO_2. [LAC 33:III.1502.A.3]

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Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

A permit shield was not requested.

VI. PERIODIC MONITORING

Source ID	Citation	Monitoring Requirement(s)
EQT 0001 1A/1B Alt. Trim Cyclones	LAC 33:III.501.C.6	Visible emissions monitored weekly.
GRP 0002 Low VOC Ink	LAC 33:III.2143.C	Alternative 1: Solvent content monitored as needed.
		Alternative 2: VOC fraction monitored as needed.

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Sulfur Dioxide (SO_2) – An oxide of sulfur.

Sulfuric Acid (H_2SO_4) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.